

XXVII. *Characters of a few Australian Lepidoptera, collected by Mr. Thomas R. Oxley.* By EDWARD NEWMAN, Esq., F.L.S., &c.

[Read 3rd December, 1855.]

THE intelligence of the establishment of an Entomological Society and Museum at Melbourne, while it gives us assurance of the rapid advance and social progress of that infant colony, leads us to anticipate results in Natural History which the isolated labourers in this distant land could never hope to attain: at the same time it wafts to us across the world of waters a silent reproof of our own neglect of the entomological riches of a soil bound by every tie but that of proximity to our own. How few, how meagre, how scattered have been the attempts of Englishmen to make known the Entomology of Australia! the names of Lewin, Donovan, Kirby, MacLeay, Hope, Gray, Westwood, and a few others, may be noticed as those of Entomologists who have severally contributed their mite to our knowledge of the subject: on the continent Germar, Erichson and Boisduval have done more, and have done it more systematically; but even though we add the labours of our neighbours to our own, we shall still find that the insects of New Holland are, as a mass, unnamed and unarranged, even at the present day. These thoughts have arisen spontaneously while looking over a small collection made by Mr. Oxley, during a short residence in the province of Victoria; this he has obligingly placed in my hands, and I find that scarcely an insect it contains appears hitherto to have received—that first of all distinctions—a name. It is too late in life for me to attempt to supply the want which I deplore, but I beg to offer to the Society the characters of a few species of *Lepidoptera*, which I suppose to be new, thus adding my own mite to the contributions of the savans I have already enumerated.

It is interesting to find at the Antipodes forms among the *Lepidoptera* so nearly resembling those of our own country. This similarity is particularly striking amongst the *Micro-Lepidoptera*; the genera *Tortrix*, *Chimabacche*, *Tinea*, *Adela*, *Depressaria*, *Gelechia*, *Cecophora*, *Anesychnia*, *Glyphipteryx*, *Lithocolletis* and *Pterophorus*, so familiar at home, being unquestionably represented in our Australian colonies; and lead us to speculate on the characters of the country where such forms occur: thus *Tinea Ethellella* seems to assure us of the presence of Fungi; and the great preponderance

of *Æcophoræ*, suggests the idea that the stems of the *Eucalypti* are well riddled by their wood-boring larvæ; while the brilliancy of *Adela Laurella* assures us of sunny days; and the gay *Æcophora Marionella* seems destined also for diurnal display. It is interesting, and at the same time indicative of the richness of the fauna, to observe, that almost every individual is distinct as a species; not merely separable by the tutored eye of science, but possessed of differences so strongly pronounced that the most careless observer could not fail to detect them; and this remark, as to distinctness of species, seems to apply equally to others, the worn condition of which renders it dangerous to describe them.

I have only to add that, although no precise habitats have been preserved, the entire collection was made at Forest Creek, Barker's Creek and Campbell's Creek, all on the Mount Alexander range, and at a distance of about eighty miles from Melbourne.

Class LEPIDOPTERA, Linn.

Stirps PHALÆNINA, Newman.*

Genus ZEUZERA, Fabricius.

Sp. 1. *Zeuzera Duponchellii*, Newman.

Fœm.—*Alis anticis fuscis, fasciis numerosis undatis nonnunquam anastomosantibus saturatioribus; posticis basi rubiginosis, apice fusciscentibus; capite thoracque saturate fuscis; abdomine fusciscenti, basi rubiginoso.* (Alarum dilat. 3·6 unc.)

Female.—Head and thorax dark brown; abdomen brown, ferruginous at base: fore wings dark brown, with numerous darker and nearly black markings, which, as in many species of *Zeuzera* and *Xyleutes*, are arranged transversely, waved, and frequently anastomose with each other; hind wings towards the apex of an obscure dingy brown, with the transverse waved markings faintly indicated, towards the base rust-coloured.

Mr. Oxley has brought home but a single specimen of this *Zeuzera*, which I have great pleasure in naming after one of the most distinguished of Lepidopterists. There are two species with which it may be advantageously compared: first, *Cossus lituratus* of Donovan and Boisduval, identical, as I imagine, with *Cossus nebulosus* of the same authors, and certainly the *Zeuzera liturata* and *Zeuzera nebulosa* of Mr. Walker's Catalogue of the Lepi-

* Equivalent to the typical *Phalænæ* of Linnæus, viz., *Phalæna Attacus* and *Phalæna Bombyx*.

doptera Heterocera in the British Museum; and, secondly, with the *Eudoxyla Eucalypti* and *Eudoxyla Urvillii* of Boisduval, and Herich-Schæffer, combined by Mr. Walker, loc. cit., under the name of *Zenzera Eucalypti*. From both of these, however, it appears to me abundantly distinct. I am much indebted to Mr. Walker, who has so lately described the *Bombyces* in the Cabinet of the British Museum, for the kindness and care with which he has examined the six species of *Bombycidæ* here described as new: I should also add that I have adopted Mr. Walker's genera as recently described, and that Mr. Walker has obligingly decided the species named below severally to belong to the genera under which I have placed them.

Genus TEARA, Walker.

Sp. 1. *Teara denticulata*, Newman.

Fœm.—*Alis anticis fuscis, fasciâ basali undosâ, maculis discalibus duabus subrotundis, fasciis obliquis tribus, denticulatis, albidis; alis posticis albidis, fasciis tribus plus minusve denticulatis, ciliisque fuscis: subtus, alis anticis fuliginoso-fuscis, maculis discalibus duabus subrotundis, fasciisque duabus, unâ sesquialterâ pallidiori, obliquis, denticulatis albidis; posticis fuliginoso-fuscis, maculis discalibus duabus rotundis albis, fasciisque tribus (exteriori notabili) denticulatis albidis.* (Alarum dilat. 2 unc.)

Female.—Head with palpi brown; eyes black; antennæ pale brown, with a white ring near the base; pronotum whitish; mesonotum covered with long loose brown hairs; abdomen brown, with scattered whitish scales; above, fore wings dark brown, adorned with the whitish markings described below; first, a short zigzag fascia at the base, next two nearly round spots, the smaller nearer the base, and both on a median line between the base and apex of wing, the larger and outer about midway, then an oblique indistinct fascia just exterior to the larger spot, and followed by a very distinct oblique fascia with its inner margin regularly scalloped, its outer margin nearly straight, and lastly, an equally distinct oblique fascia with both margins regularly scalloped; under wings greyish white, with three undulating fasciæ and the cilia brown; the first of the fasciæ is narrow and zigzag, the second is narrow and scalloped, the third is broad, its inner margin plain, its outer margin regularly scalloped: beneath, the same markings obtain as in the upper side, but more dilute and confused, and the hind wings have also two round white spots on the disk of the wing,

both of them surrounded with a dark border; one of these spots is near the first of the fasciæ, the second, half way between this and the base; the legs and abdomen beneath are clothed with long loose smoke-coloured hair, there is a pure white spot at the apex of the femora and another at the apex of the tibiæ.

Mr. Oxley has brought but a single specimen of this; it is a beautifully marked although plainly coloured insect, and is entirely unlike any described species with which I am acquainted.

Sp. 2. *Teara Guenèi*, Newman. (Plate XVIII. fig. 9.)

Fœm.—*Alis omnibus fuscis; utriusque maculis duabus albis, ciliis flavescentibus; antennis fuscis; capite sternoque fulvis; thorace fusco pilis longis obsito; abdominis segmentibus basalibus fulvis, apicalibus fuscis fulvo-marginatis, apice ipso fulvo.* (Alarum dilat. 2 unc.)

Female.—Head and prothorax fulvous, antennæ about as long as the thorax, slender, slightly pectinated, brown; eyes small, brown; mesonotum brown, clothed with long spreading brown hairs; abdomen fulvous at the base, three segments near the apex nearly black, their margins fulvous, the penultimate segment brown, the last fulvous: wings on both sides of an uniform smoky brown, each with two conspicuous white spots and fulvous cilia; in the fore wing the larger white spot is a square with the angles rounded, it is placed about the centre, but nearer the costa than the anal angle, and nearer the apex than the base, between this and the base is a smaller rounder spot; in the hind wings the larger spot is drop-shaped, rather nearer the costal margin than the anal angle, the lesser spot is less clearly defined and exactly intermediate between the larger and the base of the wing.

This beautiful insect is dedicated to M. Guenée, as a slight tribute of my profound admiration of that prince of living Lepidopterists. The specimen is, I believe, at present unique, and I know of nothing at all resembling it in the distribution of colour.

Sp. 3. *Teara Edwardsii*, Newman. (Plate XVIII. fig. 10.)

Mas.—*Alis anticis flavido-fulvis, arcâ basali ultra medium extensâ, et maculam pallidam includente, plumbeo-fulvâ; posticis fulvis concoloribus; cæteris fulvis, oculis abdomineque mediano nigris.* (Alarum dilat. 1.5 unc.)

Male.—Antennæ about as long as the thorax, deeply and uniformly bipectinated from the base to the tip, the shaft fulvous, the ramuli tinged with brown; eyes very black; head and thorax

fulvous, clothed with long loose hair; abdomen fulvous at the base, then with five segments dorsally black, the apex surrounded with a fringe of long spreading fulvous hair: above, fore wings fulvous, the apical area bright, the basal area extending beyond the middle, tinged with lead-colour and including a nearly white median spot, which is surrounded with bright fulvous; hind wings pale fulvous; underside uniformly pale fulvous.

This species is dedicated to Mr. Henry Edwards, now at Melbourne ardently studying the insects of Australia under their native sun. A single specimen only was taken, which seems abundantly distinct from anything previously described.

Genus TERMESSA, Walker.

Sp. 1. *Termessa Shepherdi*, Newman. (Plate XVIII. fig. 11.)

Mas et Fœm.—*Alis anticis albidis, basi, fasciis duabus latis undatis, marginæ quoad partem nigricantibus; posticis flavis, maculis duabus versus marginem sitis nigricantibus; maxillis luteis; labipalpis nigris; capite flavo; oculis antennisque (basi flavo excepto) nigris; pronoto et patagiis nigris; mesonoto albedo; abdomine flavo.* (Alarum dilat. 1·2 unc.)

Male and Female.—Maxillæ long, yellow; palpi entirely black; head bright yellow; eyes black; antennæ brown, yellow at the extreme base; pronotum and tippets black; mesonotum whitish or cream-coloured; fore wings also cream-coloured, with a small undulating black spot, or rather fascia, almost close to the base; beyond this are two broad clearly defined waved dark brown fasciæ, occupying nearly half of the wing; the first is situated rather before, the second rather beyond, the middle of the wing; the exterior margin, with the exception of the extreme apex and a portion near the anal angle, is also black; hind wings yellow, with two conspicuous black spots, the first near the apical angle, the second and larger half-way between this and the anal angle: beneath deep yellow, approaching to fulvous, the fore wings having a broad black fascia beyond the middle, and a large black costal blotch before the middle; the femora are yellow; the tibiæ and tarsi brownish.

This beautiful insect is one of the commonest species imported from the Australian continent; it does not, however, appear to have received a name. I cannot compare it with any familiar species, and I have much pleasure in dedicating it to Mr. Edwin Shepherd, one of our active and invaluable secretaries, more especially as it affords me the opportunity of acknowledging his obliging assistance while preparing these memoranda.

Genus *ÆNOSANDRA*, Walker.Sp. 1. *Ænosandra Boisduvalii*, Newman.

Mas et Fœm.—*Alis anticis niveis, sericatis, costâ fuscâ, vittâ magnâ medianâ nigrâ; posticis niveis, sericatis, nullo modo signatis; capite, prothoraceque albis; oculis antennisque fuscis; abdominis dorso nigro, fasciis sex læte flavis.* (Alarum dilat. 2·25 unc.)

Male and Female.—Head white, with a frontal black spot; thorax white; antennæ brown; eyes black; fore wings satiny white, with a slender but very distinct brown costa, and a broad central black stripe, which extends from the apex to the base, and is adorned with a few scattered yellow scales; the hind wings are entirely white, with the same satin-like gloss; the abdomen is black above, with six bright yellow fasciæ; beneath, the wings are white and glossy, suffused with a smoky tinge, the costa of the fore wings delicately margined with brown; there is no trace of the black vitta, so conspicuous on their upper surface; the legs are smoke-coloured, each adorned with four snow-white spots; the sternum is clothed with long loose smoke-coloured hair; the abdomen black, palest at the tip.

A very common Australian insect, but apparently undescribed; I have named it in honour of Dr. Boisduval, whose works are indispensable to the student of *Lepidoptera*.

Stirps *TINEINA*, Newman.*Genus *TORTRIX*, Fabricius.Sp. 1. *Tortrix Ashworthana*, Newman.

Alis anticis isabellinis, fasciâ obliquâ e margine costali mediano angulum versus analem tendente, maculisque nonnullis minutis adhuc saturatoribus; posticis pallide fuscescentibus, nubeculis saturatoribus, ciliis pallidis transverse medio saturatoribus. (Alarum dilat. ·85 unc.)

Head, including the labial palpi and antennæ, pale testaceous; eyes dark brown; thorax concolorous with the head, but having a few darker spots; abdomen pale testaceous and silky; fore wings

* On mature reconsideration I revert to the group *Tineina*, as established by myself in 1834, in preference to adopting the more restricted group to which Mr. Stainton, twenty years subsequently, applied the same name: the *Tineina* of Newman comprises the whole of that group now generally understood as *Microlepidoptera*. The *Tortricina* of Stainton properly constitutes a division of

isabelline-testaceous, with darker markings, indicated rather than pronounced; the first is basal, and consists of five or six brown points, arranged as an angulated fascia across the wing; the second is nearly central, rather broad, very oblique, its internal boundary clearly defined, its external boundary indistinct; it is of a clear ferrugino-testaceous brown, bounded internally by a few still darker spots; the hinder margin of the wing between this and the base is tinged with the same colour, the apical area of the wing has twelve or thirteen dark brown scattered spots; hind wings pale brown, immaculate; the cilia are pale and silky, with a darker central line extending throughout their length; each of the scales constituting the cilia, if examined separately, is found to be very pale at the base, much darker in the middle, and again paler at the apex; beneath the fore wings are testaceous, the costa paler, the central area deeper and more obscure, the whole sprinkled with darker spots, the hind wings pale testaceous, beautifully sprinkled with clearly-defined darker spots, most of which are elongated transversely.

Dedicated to Mr. Ashworth, one of our most indefatigable collectors of the British *Lepidoptera*, and the gentleman who has lately added *Agrotis Ashworthii* and *Trochilium Scholiæforme* to the British list. One specimen only was taken. I have great pleasure in acknowledging the valuable assistance I have received from Mr. Stainton, in preparing the description of this and the following *Tineina*; he has most obligingly examined every specimen, and agrees with me in believing them all to be hitherto undescribed.

Sp. 2. *Tortrix Standishana*, Newman.

Alis anticis sericatis, micantibus, pallide aureis, apice rufescentibus; posticis pallide fuscescentibus, ciliis concoloribus: subtus, alis anticis fuscis marginibus omnibus pallidis; posticis fuscescentibus concoloribus. (Alarum dilat. .55—·625 unc.)

Fore wings shining, pale golden with a transverse oblique ill-defined ferruginous fascia near to and parallel with the oblique outer margin; hind wings pale brown, the cilia of the same

the *Tineina*, and not a corresponding group; and the *Tineina* of the same author seems to me scarcely a natural group, but divisible into several groups equivalent to his *Torticina*. The *Crambidæ* also, on reconsideration, I believe were, at the same date, correctly combined with the *Pyalina*, a disposition of them at variance with every subsequent arrangement until that of Herrich-Schæffer, who combines them under the name of *Crambides*.

colour; beneath, fore wings brown, with all the margins pale; hind wings paler brown, with the margins concolorous.

Dedicated to Mr. Joseph Standish, whose inimitable skill in colouring entomological plates gives them a reality of appearance, and consequently a value, which no other colourer has hitherto been able to achieve. Two specimens of this insect were procured.

Genus CHIMABACCHE, Zeller.

Sp. 1. *Chimabacche Cinderella*, Newman. (Pl. XVIII. fig. 6.)

Alis omnibus cinereis concoloribus; anticis maculis parvis septem lunatis in crescenti dispositis ante marginem externum alteribusque discalibus elongatis satis distantibus fuliginosis; subtus, alis anticis fuliginosis, marginibus albidis posticis cinereis concoloribus. (Alarum dilat. 1.4 unc.)

Head, palpi, antennæ, thorax and fore wings ashy grey; eyes rather large and very black; the fore wings have a series of seven lunate blackish spots, ranged in the form of a crescent within the apical margin, exactly equidistant therefrom, and exterior to each of these on the margin itself is a black point, together forming a series parallel with the first; on the disk of the wing are several short black streaks or longitudinally lengthened spots, and in addition to these the entire surface of the wings are densely irrorated with minute black points; the hind wings are paler grey than the upper, have a silky gloss, and are entirely without markings, they are very ample; abdomen concolorous with the hind wings; beneath the fore wings are smoke-coloured, with paler margins; the hind wings are pale grey and unicolorous.

One only of this species was taken; it is in excellent condition, and affords the opportunity of stating that there is no known species nearly allied to it.

Genus TINEA, Zeller.

Sp. 1. *Tinea Ethelella*, Newman.

Alis anticis sericatis fuscis, lumine mutato nonnunquam auro-tinctis, nubeculis irroratis albidis, maculâ centrali conspicuâ albâ, margine postico late albedo; posticis nitidis basi pallidis, apice fuliginosis; capite magno et cum thorace flavidis. (Alarum dilat. .45—.65 unc.)

Head large and densely covered with erect testaceous yellow scales; antennæ and eyes black; mesonotum testaceous yellow;

patagia dark brown; fore wings brown, very silky, and when the insect is held in a certain position having a golden effulgence; their entire surface is sprinkled with paler markings; in the centre of the disk is a diaphanous spot, pale ochreous or almost white, and the inner margin of the wing throughout its entire length is testaceous yellow, forming, when the wings are closed, a conspicuous vitta down the back; the cilia are testaceous yellow; hind wings glossy light brown, rather paler at the base, the cilia also are paler; beneath, the wings are particularly silky and glittering, they are brown, with paler margins and cilia.

Three specimens were taken of this pretty *Tinea*; it forcibly reminds one of *Tinea ferruginella*, but is larger, and the cilia of the fore wings are yellow.

Genus BONDIA, Newman.

Caput mediocre rotundatum, fronte lævigato. Antennæ setacæ, valde pilosæ; labipalpi mediocres, articulo basali in viso, 2do incrassato, pyriformi, 3tio brevi, erecto, parvo, obtuso. Alæ anticæ vix latæ, fere lineares, angulo anali nullo modo producto, ciliis mediocribus; posticæ basi amplæ, apice acutæ, ante apicem paululo emarginatæ.

I am not acquainted with any genus of *Tineadæ* with which this insect can well be associated, although the structure of the wings is somewhat as in *Gelechia*, the labial palpi preclude the idea of placing it in that genus. I venture, therefore, to propose a new genus for its reception, and this I have pleasure in dedicating to Mr. F. Bond, one of the most zealous and most accomplished of our Lepidopterists.

Sp. 1. *Bondia Nigella*, Newman.

Alis anticis nigris, vestigio mediano pallido literam C formante signatis; posticis fere hyalinis, apicibus fuliginosis. (Alarum dilat. .675 unc.)

Head, palpi and antennæ black; fore wings black, with several tufts of raised black scales with a pale testaceous discal mark on each rather beyond the middle, and resembling the letter C, which faces the apex; the cilia are black, and at the anal angle rather long; the hind wings are nearly hyaline, the apices and cilia smoke-coloured; beneath the upper wings are dull lead-coloured, the cilia darker; hind wings rather paler, with the cilia concolorous.

There is but a single specimen, and this in many particulars, reminds one of *Gelechia Æthiops*.

Genus ADELA, Latreille.

Sp. 1. *Adela Laurella*, Newman.

Alis anticis cupreo-cæneis læte ignitis, fasciâ latâ medianâ nigrâ flavo-striatâ, pone medium lumine mutato læte chalybeis, ciliis nigris; posticis nigris, ciliis concoloribus. (Alarum dilat. .5 unc.)

Base of antennæ, tippets and fore wings golden coppery, brilliantly metallic; the wings have a broad central fascia, the ground colour of which is black, but its hue modified by the number of pale yellow longitudinal striæ, with which it is half occupied, beyond this the hue of the scales is changeable with the altered position in which the insect is held, sometimes becoming of the most gorgeous metallic green; the cilia are quite black; hind wings, together with their cilia, entirely black.

The antennæ of this beautiful little insect, being broken off close to the base, it is impossible to say what characters they may have possessed. It is not closely allied to any described species, but has some slight resemblance to *Nematois fasciellus*. Only one example was taken.

Genus ANESYCHIA, Stephens.

Sp. 1. *Anesychia Stella*, Newman. (Pl. XVIII. fig. 5.)

Alis anticis cineraceis costâ late nigricanti, strigâ latâ subcostali vix bene determinatâ, necnon maculis difformibus nigris interruptâ albidâ, spatio anteapicali intus acuminato plumbeo-nigricanti, maculis linearibus parvis octo in crescenti dispositis ante marginem externum nigris; posticis sericatis, cineris concoloribus. (Alarum dilat. .9—1 unc.)

Head, palpi, antennæ, thorax and abdomen grey; fore wings also grey, with the costa broadly black; beneath the black costa is a white vitta, originating at the base and extending to the costa near its apex; this white vitta is interrupted; first, by a black mark at its base; secondly, by an obliquely transverse fascia at about one-third of its length; thirdly, by a spot on its anterior, and, fourthly, by another on its posterior margin; the space between this white vitta and the inner margin of the wing is greyish white, almost concolorous with the vitta itself; the apical area of the wing is blackish grey, the darker hue preponderating towards the disk, and centrally produced into an acute angle, the lighter towards the

margin, and interrupted, first, by a zigzag lunulate line, and secondly, by eight linear black spots, disposed in the form of a crescent, just within the apical margin; hind wings semi-diaphanous, ashy grey, with their cilia concolorous; beneath fore wings dark smoky grey; hind wings light silky grey.

A variable species; the two specimens taken are so different as to render the task of defining them rather dangerous. There is no described species with which to compare it.

Genus *DEPRESSARIA*, Haworth.

Sp. 1. *Depressaria Melesella*, Newman.

Alis omnibus latis apice rotundatis, pallide fuscescentibus, lumine mutato perpaullo iridescentibus, anticarum maculis 2 discalibus parvis nigricantibus. (Alarum dilat. .825 unc.)

Labial palpi long, the apical joint long, slender and recurved; head, thorax and fore wings of a delicate drab colour, with a silken gloss, exhibiting in certain positions iridescent tints; just within the apical margin are a series of ten minute round brown dots, and there are two others rather more conspicuous on the disk of each wing, the first rather before, the second rather beyond the middle; hind wings slightly different in tint from the fore wings, rather more smoke-coloured but equally glossy; there is little difference in the colour of the under side.

A single specimen was taken. I cannot compare it with any known species, neither does it very readily associate with the genus in which I have placed it.

Sp. 2. *Depressaria Lewinella*, Newman.

Alis anticis latis cinereis, maculis minutis, difformibus, nigricantibus; posticis cinereo-fuscescentibus, ciliis concoloribus: subtus, alis anticis fuscescentibus; posticis perpaullo pallidioribus. (Alarum dilat. .9 unc.)

Labial palpi longer than in any of our British species, the terminal joint very long, slender; colour of the head, thorax and fore wings grey; the last have a number of black marks, all of them longitudinally elongated; hind wings pale, smoky brown, glossy or satiny, with short pale concolorous cilia; underside of the fore wings smoky brown, of the hind-wings slightly paler.

This species also differs essentially from any species of *Depressaria* previously described. Two specimens were taken.

Genus *BOYDIA*, Newman.

Caput mediocriter rotundatum, fronte lævigato; antennæ elongatæ, setaceæ nullo modo ciliatæ: labipalpi mediocres, 3-articulati, articulo basali brevi scitè cyathiformi; 2do elongato, crasso, apice truncato; 3tio apicali gracili, brevi, nudo, peracuto, paullulum recurvo; alæ anticæ elongatæ marginibus parallelis, disco longitudinaliter profundè unisulcato; posticæ amplæ, insecti quiescentis ultra anticos protrusæ, margine costali fimbriâ longissimâ venuste ornatis.

The very remarkable appearance of this insect, reposing with its hind wings protruding from beneath its fore wings, as in the familiar *Gastropacha Quercifolia*, and each furnished with a plume of delicate long hairs attached to its costal margin, at once distinguishes it from any other of the *Tineadæ* with which I am acquainted: the labial palpi also differ from those of any described genus, and the deep sulcus on the fore wings is a character of interest. I have dedicated the genus to Mr. Thomas Boyd, one of our most zealous and active Microlepidopterists. The genus will in all probability be found to be most nearly allied to our *Anchinia*.

Sp. 1. *Boydia criniferella*, Newman.

Alis anticis nigricantibus, albido-irroratis, strigâ basali latâ binisque medianis parvis albidis; posticis nigricantibus pilis plurimis longissimis fuliginosis margine antico ortis. (Alarum dilat. .1 unc.)

Basal cup-shaped joint of labial palpi white, second joint white beneath nearly to the tip, which is tinged with brown, third or apical joint white at the base, black at the tip, head brown, eyes large and black; thorax and abdomen brown, the apex of the latter testaceous; fore wings brown, irrorated with white scales; on the basal disk is a vitta composed of white scales, which terminates rather before the middle of the wing; this is interrupted by a dark brown or nearly black blotch in the very centre of the wing, and beyond this are two short, white, parallel vittæ; hind wings testaceous brown, the costal margin tinged with ferruginous, the hairs constituting the plume attached to the costa are ferruginous at base, dusky brown at apex: beneath, body and legs whitish; wings dusky brown.

Three specimens of the insect are preserved: it is totally different from any species previously described.

Genus *TORTRICOPSIS*, Newman.

Caput rotundatum, fronte lævigato; antennæ corpore longiores, setaceæ, simplices, nullo modo armatæ; maxillæ elongatæ; labi-palpi majores, porrecti, apice recurvi, articulo basali invisio, 2do magno, deltoideo, angulo basali ad orem extenso, producto, porrecto, subacuto, apicali obtuso, articulum tertium erectum, paululo recurvum, gracilem, elongatum emittente; alæ anticæ latæ, amplæ, basim versus arcuatæ, apice paullo falcatæ, margine externo fere quadrato; alæ posticæ latæ; cilia brevita.

This pretty insect in the form and size of its wings closely resembles a *Tortrix*, the short cilia also seem to indicate an approach to that family; but the labial palpi, which are fortunately very perfect, much more nearly approach those of *Upso-lophus* and *Aplota*, nevertheless it differs from these in the smoothness and roundness of its head and forehead, and in outline the quiescent insect has exactly the bell-shaped figure of a true *Tortrix*.

Sp. 1. *Tortricopsis Rosabella*, Newman. (Pl. XVIII. fig. 8.)

Alis anticis ferrugineo-fuscis, maculâ mediocostali obliquâ saturate fuscâ, nebulâ vagâ prope marginem interiorem quoque fuscâ, margine externo ciliisque fuscis; posticis luteis margine ferrugineo-tincto, ciliis basi ferrugineis apice fuscis; abdomine pallido: subtus, alis anticis læte ferrugineis, margine ciliisque fuscis, margine postico quoque fusciscenti; posticis flavis, margine costali apice late margine postico tenuiter ferrugineis, radiis nigro-apicatis; coxis ventreque læte miniatis; femoribus tibiisque rufescentibus; tarsis fuscis. (Alarum dilat. .95 mnc.)

Maxillæ ferruginous; head, labial palpi and antennæ mouse-coloured; thorax ferruginous; fore wings ferruginous, with an oblique, somewhat ill-defined, brown mark near the middle of the costa, a suffused brown cloud near the middle of the inner margin, and the external margin and cilia also brown; hind wings yellow, with a ferruginous tinge along the margin; each individual scale of the fringe of the hind wings has the basal half ferruginous, the apical half brown, so that the cilia have two distinct colours, next the wing they are bright ferruginous, externally dingy brown: beneath, the fore wings are bright ferruginous, slightly dusky at the apex; the hind wings yellow, with the costal margin, a broad apical portion narrowed along the outer margin ferruginous; the

apical area is irrorated with brown; the cilia of the wings are bright ferruginous towards the wing, brown externally; the coxæ and under side of the abdomen are bright red; the femora and tarsi ferruginous; the tarsi brown.

There is but a single specimen of this insect. There is no described species with which I can possibly compare it.

Genus *ÆCOPHORA*, Zeller.

Sp. 1. *Æcophora Marionella*, Newman. (Pl. XVIII. fig. 7.)

Alis anticis nigricantibus, utriusque maculis octo difformibus albis, posticis flavis, marginibus nigricantibus; capite, pronoto, metanotoque flavis, mesonoto nigricanti; abdomine nigricanti cingulis apiceque aurantiacis. (Alarum dilat. .8—1 unc.)

Head and pronotum yellow; antennæ brown; labial palpi very long, the second joint yellow above, black beneath, the apical joint entirely black; mesonotum black; tippets black at the base, yellow at the apex; metanotum yellow; abdomen black, with golden bands and apex; fore wings black, with eight pure white markings; the first of these is elongate, situate on the costa at its base,—the second is discoidal, somewhat deltoid, and equidistant from the costa and inner margin,—the third is discoidal, situate almost in the middle of the wing as regards its length, but much nearer the costal than the inner margin, it is slightly the largest of the eight,—the fourth is below this, longitudinally lengthened and the smallest of the eight,—the fifth is discoidal, transversely lengthened and placed nearer the inner margin than the costa,—the sixth is also transversely lengthened and reaches from near the sixth obliquely to the costa,—the seventh is transversely long and narrow, it is below the sixth and touches the anal angle of the wing,—the eighth is on the basal portion of the cilia, lengthened transversely and situate at the apex of the wing; with the exception of this mark the cilia are brown; hind wings with the disk yellow, the margins broadly tinged with brown, the cilia paler: beneath, fore wings brown, with two oblique testaceous obscure costal markings, cilia pale; hind wings dull yellow, with a central marking, the extreme apex and the posterior margin brown, cilia pale.

Four specimens were taken. It is a beautiful and very conspicuous insect, and not nearly allied to any known species.

Sp. 2. *Æcophora bimaculella*.

Alis anticis flavis, fasciâ medianâ latâ ad marginem posticum dilatatâ, alterâ apicali, ciliisque fuscis; posticis fuscis concoloribus. (Alarum dilat. .65—.9 unc.)

Tortrix bimaculana, Donovan, Insects of New Holland.

Several specimens were taken. I have redescribed it as affording a second instance of the extremely near approach made by the *Tineadæ* of New Holland to our true *Tortrices*; no one who sees this pretty insect could feel the least surprise that Donovan should describe it as a *Tortrix*.

Sp. 3. *Æcophora Isabella*, Newman. (Pl. XVIII. fig. 2.)

Alis anticis flavescentibus, costâ fasciisque obliquis duabus, externâ tenuiori, fusciscentibus, ciliis pallidis; posticis fuliginosis, concoloribus: subtus, alis omnibus fuliginosis, concoloribus. (Alarum dilat. .8 unc.)

Head, labial palpi and thorax pale yellow; antennæ and abdomen dingy brown, the apex of the latter yellow; fore wings pale yellow, with the costa brown, the apical region of the wing is adorned with two transverse oblique fasciæ of a pale purplish brown colour; the specimens being evidently wasted it is difficult to define the colour with greater precision; the first of these fasciæ commences on the inner margin, somewhat within the anal angle and proceeds obliquely upwards to the costa, terminating near the apex of the wing; the second and smaller fascia is united with the first at its base, and follows the outer margin of the wing almost to its apex, leaving a slender marginal line of yellow, the cilia are concolorous with the disk of the wing; hind wings dusky brown, with concolorous cilia: beneath, all the wings are uniformly smoky brown, with concolorous cilia.

There is but a single specimen of this insect; it is referred with doubt to the genus *Æcophora* and has no resemblance whatever to any described species.

Sp. 4 *Æcophora Ellenella*, Newman. (Pl. XVIII. fig. 3.)

Alis anticis sericato-fuliginosis, ciliis concoloribus; posticis luteis, apice, margine postico, ciliisque fusciscentibus. (Alarum dilat. 1 unc.)

Head, palpi, antennæ, thorax and abdomen pale drab brown, with a satiny lustre which also pervades the entire upper surface

of all the wings ; fore wings uniformly brown, with concolorous cilia ; hind wings with the disk yellow, the margin and cilia pale brown : beneath, the wings are of the same hues as above, but the yellow is less clearly defined and less intense in hue.

Only a single specimen taken ; it has no resemblance to any known species.

Sp. 5. *Æcophora Arabella*, Newman. (Pl. XVIII. fig. 4.)

Alis anticis fulvis, strigâ ante costam alterâque ante marginem interiorem, fasciâ obliquâ intus pone medium curvatâ, ciliisque nigricantibus ; alis posticis sericatis, fuliginosis, concoloribus. (Alarum dilat. .85 unc.)

Head and prothorax dull yellow ; palpi and antennæ brown ; thorax brown, with yellow markings scarcely susceptible of precise definition until more perfect specimens are obtained ; fore wings divided by an oblique brown fascia beyond the middle, the discal area between this and the base is bright yellow, with a conspicuous brown vitta just below the costa, and a second occupying the inner margin ; beyond the fascia the wing is lead-coloured, the cilia concolorous ; hind wings uniformly brown, with concolorous cilia : beneath brown, the yellow portion of the fore wings obscurely indicated.

A single specimen taken ; it has no resemblance to any described species.

Sp. 6. *Æcophora Zitella*, Newman.

Alis anticis fulvis, costa basali nigricante, ciliis fusciscentibus ; posticis fusciscentibus, concoloribus. (Alarum dilat. .7—1 unc.)

Head and antennæ fulvous ; maxillary palpi very long, fulvous above the second joint, brown beneath ; thorax and abdomen tawny ; fore wings golden fulvous, with a slender black line on the costa at the base, cilia brown ; hind wings entirely smoky brown, with concolorous cilia : beneath, all the wings uniformly brown, very silky and glittering, the cilia slightly paler.

Evidently closely allied to our British *Æcophora fusco-aurella* of Haworth, which Mr. Stainton as well as the late Mr. Stephens regard as identical with *Tinea unitella* of Hübner. (See Ins. Brit. Tin. p. 161.) The antipodean insect now described is, however, much larger and paler, and in other respects abundantly distinct.

Sp. 7. *Æcophora Paulinella*, Newman. (Pl. XVIII. fig. 1.)

Alis anticis argenteis, sericatis, nitidissimis, fasciis duabus obliquis fuscis maculâque interveniente deltoideâ ad marginem interiorem sitâ centro niveo ornâtâ quoque fuscâ; alis posticis fuscescentibus, concoloribus; insectum venustum! (Alarum dilat. .7—9 unc.)

Labial palpi long, the terminal joint particularly elongated, slender and cylindrical, greyish; head and incrassated base of antennæ white; shafts of antennæ, together with thorax and abdomen, dusky grey; fore wings silvery white, with certain markings which are nearly black; the first of these is an obliquely curved fascia which commences at about the middle of the inner margin and terminates on the costa beyond its middle; the second is a deltoid spot with a silvery centre seated on the inner margin; the third is an oblique fascia occupying the outer margin, almost a duplicate of the first; these three markings are united by the similarly coloured inner margin of the wing; the cilia are brown at the anal angle, thence to the apex white; hind wings smoky brown, with concolorous cilia; under side of the wings smoky brown, the cilia paler.

I am reluctant to propose a new genus for this insect, but I am perfectly aware that it differs essentially from *Æcophora* in many of its characters, more especially in having a distinctly falciform outer margin to the fore wings. It is widely different from any described species.

Sp. 8. *Æcophora Agnesella*, Newman.

Alis anticis albis, strigâ medianâ ante apicem vage divisâ testaceo-fuscâ; posticis albicantibus ciliis concoloribus: subtus, alis anticis fuscis; posticis albidis; ciliis omnibus albidis. (Alarum dilat. .85 unc.)

Labial palpi long, slender and recurved, grey; head smooth, and together with thorax nearly white; antennæ whitish on the upper side towards the base, otherwise brown; abdomen whitish, each segment somewhat testaceous at the base, the apex bearing a tuft of whitish hairs; fore wings white, with a subcostal testaceous vitta extending from the base to about two-thirds the length of the wing, there dividing, and the two branches slightly

divaricating, extend not only to the margin but to the extreme points of the cilia; hind wings white, without marks, the cilia, except as already indicated, white: beneath, fore wings brown; hind wings and all the cilia white.

One specimen only was taken; it is not nearly allied to any described species.

Sp. 9. *Ecophora Semelella*, Newman.

Alis anticis flavido-cinereis fasciis 3 nigrificantibus, quarum basali rectâ, medianâ quoad costam divisâ ramulis divaricatis quoad marginem posticum integrâ literam V fere fngenti, tertiâ difformi quoad marginem posticum latâ vix arcuatâ, quoad costam tenuissimâ costam ipsam vix attingenti, margine (alarum anticarum) externo quoque nigricante spatio medio pallido; posticis fuliginosis, ciliis concoloribus. (Alarum dilat. .55 unc.)

Head and labial palpi testaceous yellow; eyes and antennæ dark brown; pronotum yellow; tippets apparently dark brown; fore wings yellowish-grey, with various transverse dark brown marks; the first is a costal spot near the base, the second a straight but lobed fascia; following this are two narrow and abbreviated fasciæ, one rising from the costa, the other from the hind margin; these do not meet on the disk of the wing; beyond them, and occupying the centre of the wing is a V-shaped mark, that is, a fascia single and entire at the inner margin, but immediately divided into two widely separating branches which reach the costa; beyond this again is an amorphous fascia, its basal portion broad and somewhat lunate, its apical portion bent and much narrower does not reach the costa; finally a blotch of the same dark colour occupies the apical and another the anal angle; each of these gives off a slender limb toward the disk of the wing, almost enclosing a pale marginal space; underwings brown, with concolorous cilia: beneath, all the wings are dark brown, with concolorous cilia.

A single specimen of this insect was taken. Mr. Stainton thinks it has some resemblance to *Ecophora Borkhausenii*, but is abundantly distinct.

Sp. 10. *Œcophora Hecatella*, Newman.

Alis anticis fuliginosis, maculâ basali mediocri, alterâ costali medianâ deltoideâ, duabusque minutis discalibus nigris, alarum apice saturatiori vix nigricanti; alis posticis fuliginosis, ciliis concoloribus: subtus, alis omnibus saturate fuliginosis, concoloribus.
Alarum dilat. .75 unc.

Head, thorax and fore wings smoky lead-coloured; eyes, palpi and antennæ darker; there are several nearly black markings on the fore wings; the first occupies the entire breadth of the wing at its base, the second occupies the middle of the costa and is triangular, the third is also costal and apical, obscure and ill-defined; in addition to these are several black points, a series of which is parallel with the outer margin of the wing; the hind wings are smoky lead-coloured without markings, the cilia concolorous: underside somewhat darker than the upper and without markings.

A single specimen only was taken. It is very different from every described species.

GENUS GLYPHIPTERYX, Hübner.

Sp. 1. *Glyphipteryx Sabella*, Newman.

Alis anticis nigro-æneis, fasciis quatuor costalibus argenteis, maculisque duabus, deltoideis, costalibus apicem versus albidis, maculâque difformi argenteâ in angulum posticum; posticis fuliginosis concoloribus. (Alarum dilat. .45 unc.)

Fore wings nigro-æneous, glittering, adorned posteriorly with yellowish scales and having four silvery white narrow fasciæ, which extend from the costa about half-way across the wing; beyond these and very near the apex of the wing are two deltoid white spots on the costa itself; from the inner margin of the wing arise other very similar but less distinct fasciæ, and these almost meet those on the costa; in the anal angle is a distinct silvery mark; the cilia are pale brown, with a nearly black mark at the apex: hind wings smoky brown, with concolorous cilia.

This pretty insect is evidently allied to our *Glyphipteryx Thrasonella*. Two specimens were taken, and these differ much in their marking; the silver markings descending from the costa are more perpendicular than in *G. Thrasonella*, and there is a black hook in the apical cilia of the fore wings, thus supplying an additional connecting link between *Thrasonella* and *equitella*.

GENUS LITHOCOLLETIS, Zeller.*

Sp. 1. *Lithocolletis Lalagella*, Newm.

Alis anticis niveis, fasciis quatuor (quarta semialtera) plumbeis marginibus propriis nigerrimis; posticis angustissimis fuliginosis, ciliis longissimis concoloribus. (Alarum dilat. .4 unc.)

Head silvery white, with black eyes; fore wings snowy white, with four broad lead-coloured transverse markings, each of which has black margins; the first of these is basal, the second rather before, the third rather beyond the middle of the wing, the fourth is amorphous, it occupies the apex of the wing, and encloses a snowy white deltoid costal spot; the cilia are whitish, with a slight interruption of brown near the apex; the hind wings are very narrow and lined with long cilia attached to both margins; they are of a dingy white, inclining to silvery white along the middle.

In this pretty insect, of which a single specimen only was taken, the dark markings on a white ground immediately remind one of our *Lithocolletis hortella* and *sylvella*, but the simple transverse character of the second and third fasciæ at once distinguish the Australian from either of the British species.

GENUS PTEROPHORUS, Geoffroy.

Sp. 1. *Pterophorus tinctidactylus*, Newm.

Albus citreo-tinctus, lunula alarum pallide fusca anticarum, posticis dilute ochreo-cinereis. (Alarum dilat. .65 unc.)

White with a very slight tinge of lemon colour; on the fore wings is an indistinct brown mark just at the base of the cleft; the hind wings are pale ochreous grey.

A single specimen only was taken; it a good deal resembles *P. osteodactylus*, but is readily distinguished by the paler colour of the posterior wings, and by the citron-yellow—not fuscous hue—of the antennæ. A second species of *Pterophorus* also forms part of the collection, but is so injured that I cannot venture to characterize it.

* As I understand the genus *Lithocolletis* of Zeller, it is not equivalent to the long previously characterized *Lithocolletis* of Hübner; it would, therefore, have been less confusing had Zeller given to his newly associated group an entirely new name: it is now too late, since the second *Lithocolletis* has become a classical, the first an obsolete, name.